

PROPERTY PLANNING COMMON ELEMENTS

COMPONENTS OF MASTER PLANS

HABITATS AND THEIR MANAGEMENT

Herp Hibernacula

Cold-blooded herps (frogs, salamanders, snakes, turtles and lizards) hibernate at sites that will protect them from winter weather and predation during their periods of inactivity. Rock outcrops, caves, hollow logs, crayfish burrows, small mammal burrows, rotted-out root channels, ant mounds, lake and stream bottoms, stream shorelines, leaf litter, sandy soil below the frost line, and many human-made structures (e.g., house foundations, bridge abutments, etc.) may serve as hibernacula.

Some herps are considered generalists in terms of overwintering habitat while others are considered specialists. For example, several species of frogs spend the winter underwater and just need to find a body of water that doesn't freeze solid in the winter. In contrast, the Blanchard's cricket frog cannot be inundated for long periods, and therefore must seek out microhabitats/microclimates, such as cracks and crevices near the shoreline, where temperatures hover just above freezing.

Some species, such as timber rattlesnakes or gartersnakes, overwinter communally while other species, such as slender glass lizards and American toads, overwinter singly. Known communal herp hibernacula are mapped in the NHI database.

It is especially important to avoid impacts to herps while they are overwintering, as the animals are essentially immobile and incapable of moving out of harm's way.

Management Objectives

- Protect known communal herp hibernacula and other areas where herps are known to congregate during the winter.
- Maintain and enhance favorable habitat around known herp hibernacula, including habitat heterogeneity that provides thermoregulation opportunities for these cold-blooded species.

Management Prescriptions

- For common species that overwinter in the water or below the frost line, management in the uplands generally should be conducted during the species' inactive period to avoid impacts. However, drawdowns should be planned carefully, as winter drawdowns have the potential to kill entire populations. Drawdowns, dredging, or other projects that impact water should only occur during the active season (typically May 1 to September 30).
- For common species that overwinter near the surface (e.g., leaf litter, logs, etc.), management should be conducted during the active period so that some individuals can move out of harm's way. Removal surveys can be performed if there is a concern that animals will be impacted. Removal surveys involve walking the site immediately prior to disturbance and collecting any herps that are found. The animals can then be



relocated immediately, out of the disturbance area but within contiguous, similar habitat. Depending on the species and habitat present, a distance of 100-200 ft typically is recommended.

- Keep herp hibernacula free of trees to allow sunlight to reach the entrance. However, some downed woody debris and shrubs are beneficial for protection and basking.
- Minimize trails (motorized and non-motorized) and trail use near known herp hibernacula to protect against disturbance or harassment during this sensitive period.
- For work occurring where rare species may be present, consult the Endangered Resources Review Program (DNRERReview@wisconsin.gov) and/or refer to the Bureau of Natural Heritage Conservation's [Species Guidance](#) documents.

